

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY


(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 12 OCT 2005

WIPO

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Applicant's or agent's file reference FR6122 PCT	<b>FOR FURTHER ACTION</b> See Form PCT/PEA/416	
International application No. PCT/EP2004/007760	International filing date (day/month/year) 14.07.2004	Priority date (day/month/year) 29.07.2003
International Patent Classification (IPC) or national classification and IPC B29B9/06, C08J3/12		
Applicant BASELL POLYOLEFINE GMBH et al.		
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>		
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input checked="" type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</p>		
Date of submission of the demand  29.01.2005	Date of completion of this report  13.10.2005	
Name and mailing address of the international preliminary examining authority:   European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer  Fageot, P  Telephone No. +31 70 340-	



**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/EP2004/007760

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**Box No. I Basis of the report**

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1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

**Description, Pages**

1-4 as originally filed

**Claims, Numbers**

1-12 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	6
	No: Claims	1-5,7-12
Inventive step (IS)	Yes: Claims	
	No: Claims	1-12
Industrial applicability (IA)	Yes: Claims	1-12
	No: Claims	

**2. Citations and explanations (Rule 70.7):**

**see separate sheet**

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**Box No. VII Certain defects in the international application**

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The following defects in the form or contents of the international application have been noted:

**see separate sheet**

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**Box No. VIII Certain observations on the international application**

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The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

**Re Item V.**

1. The following documents are referred to in this communication:

D1: US-A-3 089 194  
D2: CH-A-417 088  
D3: EP-A-0 634 439  
D4: US-A-3 902 704  
D5: EP-A-0 393 379

2. The following statements are made taking into account item VIII, whereby it is to be noted that features which do not comply with article 6 PCT can not be used for distinguishing over prior art in order to assess novelty in the sense of Article 33(2) PCT or inventive step in the sense of Article 33(3) PCT; these features are herein under underlined.

- 2.1 Document D1 discloses (the references in parenthesis applying to this document): a process for granulating powders of thermoplastic polymers, in which the polymer powder prepared in a polymerization reactor (*col. 4, lines 42-64*) is introduced into an extruder, melted and homogenized in the extruder, then pressed through an extrusion die and granulated (*col. 2, line 68 to col. 3, line 3, fig. 1*), wherein an organic solvent or suspension medium is added to the polymer powder in an amount in the range from 0.001 to 20 % by weight, based on the total weight of polymer powder plus solvent or suspension medium, prior to introduction into the extruder (*col. 2, lines 62-65*).

The subject-matter of claim 1 is therefor not new in the sense of Article 33(2) PCT.

- 2.2 Documents D2 and D3 disclose also the combination of features of claim 1. For more details see the International Search Report.
- 2.3 Document D1 discloses (the references in parenthesis applying to this document): a method for the increase of the throughput of thermoplastic polymer powder through an extruder during granulation (*col. 2, line 68 to col. 3, line 3, fig. 1*) thereby maintaining the energy consumption, whereby an organic solvent or suspension medium is added to the polymer powder prior to its introduction into

the extruder in an amount of from 0.01 to 5 % by weight (*col. 2, lines 62-65*), based on the total weight of the mix of polymer plus organic solvent or suspension medium.

The subject-matter of claim **11** is therefor not new in the sense of Article 33(2) PCT.

- 2.4 Document D1 discloses (the references in parenthesis applying to this document): a method for the decrease of energy consumption of an extruder during granulation of thermoplastic polymer powder (*col. 2, line 68 to col. 3, line 3, fig. 1*) thereby maintaining the throughput of polymer through the extruder, whereby an organic solvent or suspension medium is added to the polymer powder prior to its introduction into the extruder in an amount of from 0.01 to 5 % by weight (*col. 2, lines 62-65*), based on the total weight of the mix of polymer plus organic solvent or suspension medium.

The subject-matter of claim **12** is therefor not new in the sense of Article 33(2) PCT.

**3. Dependent claims 2 - 10**

- 3.1 Due to the lack of novelty of the subject-matter of independent claim **1**, it can at present not be confirmed whether the additional features of the various dependent claims fulfill the requirements of Rules 13(1) and (2) PCT.
- 3.2 However, dependent claims **2 - 10** do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step; the cited prior art documents D1, D2, D3, D4 and D5 already disclose these features as such. For more details see the International Search Report.

- 4.** The subject-matter of claims **1 to 12** is considered as susceptible of industrial application (Article 33(4) PCT).

**Re Item VII.**

1. The independent claims have not been drafted in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the closest prior art (document D1) being placed in their respective preambles (Rule 6.3(b)(i) PCT) and with the remaining features being included in their characterising parts (Rule 6.3(b)(ii) PCT).
2. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1, D2, D3, D4 and D5 is not mentioned in the description, nor are these documents identified therein.

**Re Item VIII.**

In respect of article 6 PCT, the following is observed.

1. Claims **1**, **11** and **12** have been drafted as separate independent claims of the method category. Under further reference to the PCT-Guidelines 5.15 and 5.42, it can not be deducted from these independently drafted claims which features are essential for the definition of the area for which protection is sought. The aforementioned claims therefore lack conciseness.
2. Since the throughput is dependent on many variables of an extrusion process the method defined in claim **11** appears to lack essential method feature for enabling the skilled man to achieve the desired effect. Consequently the subject-matter of claim **11** lacks clarity, cf. PCT-Guidelines 5.15 in conjunction with 5.35.
3. Similar accounts for claim **12** in respect of energy consumption whereby it is to be further mentioned that the term energy consumption as such is undefined in claim **12**, for instance as energy/time unit or energy/diameter or energy/kg polymer etc, thereby causing a further lack of clarity of the subject-matter of claim **12**.